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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,546	12/02/2004	Han Leng Paxton Tan	SG 020011	5711

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BRIARCLIFF MANOR, NY 10510

EXAMINER

HU, RUI MENG

ART UNIT PAPER NUMBER

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/516,546

Applicant(s)

TAN, HAN LENG PAXTON

Examiner

RuiMeng Hu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to applicant's amendment/arguments filed on 11/28/2006. **This action is made final.**

Response to Arguments

2. Applicant's arguments filed on 11/28/2006 have been fully considered but they are not persuasive.

In the same field of endeavor, Daughtry Jr. et al. clearly teach (column 9 line 44-column 10 line 20) that testing a received signal multiple times, and to accept the signal if most of the times tested valid (as to avoid accepting an interfering signal or noise). The applicant argued that the selection technique taught by Daughtry Jr. et al. is applied to Automatic Frequency Control (AFC) in cellular telephone and not obvious to use in the environment of FM-receiving for channel presetting, however, as emphasizing on the idea of testing multiple times of received RF signal as to make certain it is a proper signal from a valid transmitter, it would have been obvious to a ordinary skilled person in the art to employ said idea in a FM receiver to test a received FM signal multiple times as to make certain it is a proper signal from a valid transmitter.

Response to Amendment

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 1-3** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kennedy et al. (European Patent Application Publication # 0430469) in view of

Daughtry, Jr. et al. (U.S. Patent # 5940748) further in view of **Tomita (U.S. Patent # 5937338)**.

Consider **claim 1**, Kennedy et al. clearly disclose method of auto-tuning a radio FM-receiver by scanning the receiver frequency band until a FM signal is received (column 1 lines 11-15) meeting criteria (Figure 3, level detector means 32, automatic frequency control (AFC) window detector means 33, peak or noise detector means 31) for identifying the signal as being of a predetermined quality (column 2 lines 2-5), particularly coming from a valid FM station, wherein at least during tuning it is established whether or not the FM signal meets the criteria (column 6 lines 6-16) (Abstract, column 1 lines 20-34, column 4 line 33-column 5 line 7, Figures 1-4).

However Kennedy et al. fail to disclose whereafter the FM signal is tested predetermined number of times, and information denoting a frequency of the FM signal is only stored if the criteria are met a majority of the times.

In the same field of endeavor, Daughtry, Jr. et al. clearly disclose a method and a system for determining the integrity of a received RF signal (to avoid accepting an interfering signal or noise) by measure signal strength and measure signal frequency a predetermined number of times, and such signal is accepted for further process if at least one-half of the times the condition is met (Abstract, column 10 lines 1-20, figure 3A).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Daughtry, Jr. et al. into the signal quality detecting circuit for FM receivers of Kennedy et al. as to determine a received FM signal is surely a desired signal from a valid transmitter and to avoid of accepting an interfering signal or noise or any unwanted signals, by measuring said FM signal multiple times and to accept said FM signal if most of the times the conditions are met.

However Daughtry, Jr. et al. fail to mention of storing a signal.

In the same field of endeavor, Tomita clearly discloses a scanning radio receiver includes a programmable memory to store frequencies received by the scanning radio receiver (Abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Tomita

into the signal quality detecting circuit for FM receivers of Kennedy et al. as modified by Daughtry, Jr. et al. as to store all desired FM radio frequencies for quickly and conveniently receiving broadcasts from stored FM radio stations in future.

Consider **claim 2, as applied to claim 1 above**, Kennedy et al. as modified by Daughtry, Jr. et al. and Tomita, fail to disclose that the results are read 10 times and the information denoting a frequency of the FM signal is only stored if at least 8 times thereof the criteria are met.

In the same field of endeavor, Daughtry, Jr. et al. clearly disclose such signal is read 10 times and such signal is accepted for further process if at least one-half of the times (at least 5 times) the condition is met (column 10 lines 1-20, figure 3A, the number of times that the signal meets the criteria is preferred to be over one-half of the total times taken in both situations of which disclosed in the application and the reference, a false determination over the received signal would not likely to occur if at least half of the times that the signal meets the criteria).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Daughtry, Jr. et al. into the signal quality detecting circuit for FM receivers of Kennedy et al. as to determine a received signal is surely a desired signal from a valid transmitter and to avoid of accepting an interfering signal or noise or any unwanted signals, by measuring such received signal multiple times and such signal is accepted if most of the times the conditions are met.

However Daughtry, Jr. et al. fail to mention of storing a signal.

In the same field of endeavor, Tomita clearly discloses a scanning radio receiver includes a programmable memory to store frequencies received by the scanning radio receiver (Abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Tomita into the signal quality detecting circuit for FM receivers of Kennedy et al. as modified by Daughtry, Jr. et al. as to store all desired FM radio frequencies for quickly and conveniently receiving broadcasts from stored FM radio stations in future.

Consider **claim 3**, Kennedy et al. clearly disclose an auto tuning device (integrated circuits, column 1 lines 20-34) comprising means for registering whether or not a FM signal, received in a radio FM receiver, meets criteria (Figure 3, level detector means 32, automatic frequency control (AFC) window detector means 33, peak or noise detector means 31) for identifying the signal as being of a predetermined quality (column 2 lines 2-5), particularly coming from a valid FM station (column 6 lines 6-16) (Abstract, column 4 line 33-column 5 line 7, Figures 1-4).

However, Kennedy et al. fail to disclose counting means for registering in an interval of a predetermined number of times that is registered whether or not the FM signal meets the criteria, the number of times the FM signal meets the criteria, and means for storing information denoting a frequency of the FM signal only if the criteria are met a majority of the times.

In the same field of endeavor, Daughtry, Jr. et al. clearly disclose counting means (In Fig. 3A, 310, 315) to register in an interval of a predetermined number of

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times (10 readings) that is registered whether or not the signal meets the criteria, the number of times the signal meets the criteria, and accepting the signal if the criteria are met a majority of the times (Abstract, column 10 lines 1-20, figure 3A).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Daughtry, Jr. et al. into the signal quality detecting circuit for FM receivers of Kennedy et al. as to determine a received signal is surely a desired signal from a valid transmitter and to avoid of accepting an interfering signal or noise or any unwanted signals, by measuring such received signal multiple times and such signal is accepted if most of the times the conditions are met.

However Daughtry, Jr. et al. fail to mention of storing a signal.

In the same field of endeavor, Tomita clearly discloses a scanning radio receiver includes a programmable memory to store frequencies received by the scanning radio receiver (Abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the selection technique taught by Tomita into the signal quality detecting circuit for FM receivers of Kennedy et al. as modified by Daughtry, Jr. et al. as to store all desired FM radio frequencies for quickly and conveniently receiving broadcasts from stored FM radio stations in future.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RuiMeng Hu whose telephone number is 571-270-1105. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

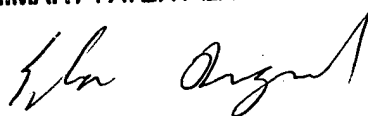
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RuiMeng Hu
R.H./rh
January 29, 2007

EDAN ORGAD
PRIMARY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Edan Orgad', is written over the printed name and title.